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THE STATUS OF THE HELLGATE RAILROAD VIADUCT IN NEW YORK CITY

HEARING

BEFORE THE

SUBCOMMITTEE ON WATER RESOURCES, TRANSPORTATION, AND INFRASTRUCTURE

OF THE

COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS UNITED STATES SENATE

ONE HUNDRED FIRST CONGRESS

SECOND SESSION

MAY 16, 1990

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CONTENTS

	Page
Moynihan, Hon. Daniel Patrick, U.S. Senator from the State of New York, opening statement of	1

WITNESSES

Claytor, W. Graham, President, Amtrak	7
Estimate of the cost to seal and prevent falling debris	12
Prepared statement	21
Manton, Hon. Thomas J., a Representative in Congress from the State of New York	2
Reser, Hon. Galen J., Assistant Secretary, Department of Transportation	17
Vallone, Peter F., Speaker, Council of the City of New York	4

THE STATUS OF THE HELLGATE RAILROAD VIADUCT IN NEW YORK CITY

WEDNESDAY, MAY 16, 1990

U.S. SENATE,
COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS
SUBCOMMITTEE ON WATER RESOURCES,
TRANSPORTATION AND INFRASTRUCTURE,
Washington, DC.

The subcommittee met, pursuant to notice, at 10:30 a.m. in room 406, Dirksen Senate Office Building, Hon. Daniel Patrick Moynihan (chairman of the subcommittee) presiding.

Present: Senator Moynihan.

OPENING STATEMENT OF HON. DANIEL PATRICK MOYNIHAN, U.S. SENATOR FROM THE STATE OF NEW YORK

Senator MOYNIHAN. A very good morning to our guests.

It is a very great distinction for us to have with us the new Speaker of the new New York City Council, Mr. Vallone. We welcome you, sir.

Mr. VALLONE. Thank you.

Senator MOYNIHAN. I ask the indulgence of our guests, this hearing was scheduled for 10 o'clock. However, Senator Akaka was being sworn in, and the Senate had to be present when that occurred. He is a very welcome Senator, and is even now giving his first address in commemoration of our former colleague, Senator Matsunaga, who was very much loved by this Senator, you may be assured. We sat together on the Finance Committee for 14 years.

The oath of office of the U.S. Senate requires a person to undertake to defend the Constitution of the United States against all enemies, foreign and domestic. We have heard that as "or" but it is "and."

We are here to discuss a particular enemy of the United States which is called rust, and a great engineering miracle that crosses the East River between the mainland United States and Long Island, to wit, the Hellgate Bridge.

The Hellgate Bridge was built, as the Speaker knows, and the chairman, Mr. Manton, knows, in 1917. It was the work of Gustav Lindenthal, who turns out to have been a self-taught bridge designer. A work not yet published by Tom Buckley reports that all efforts to locate the records of his engineering education in Switzerland have failed. But he was one heck of an engineer.

This was the time of the Pennsylvania Railroad in all its glory, and a structure of surpassing engineering skill and, as is so often

the case with a great piece of engineering, it is a great piece of design. It is a beautiful bridge. And it has a problem. It has not been painted for 50 years.

We have been saying in this committee year in and year out for a decade now that infrastructure is a serious issue. We are disinvesting in the American plant. The national roof is leaking. We can't get away with it. There comes a time, and things get to be past the point where they can be repaired, and we find out how much we have lost.

This bridge is an absolute necessity to the transportation systems of the Nation's largest city and the world's most important city. It sits there in striking contrast to the Triborough Bridge. I remember counting the number of cars on the Triborough Bridge the day it opened, I was living in Astoria in those days. The Triborough Bridge is a newer facility. It opened in 1937 or 1938.

In any event, it is painted continuously. As I understand the system, they have a painting crew that just keeps painting the Triborough Bridge, they do not wait. The schedule that the Hellgate Bridge is on, they would have painted it once, and still be waiting to get started on it again. And it would be all rusted, and beginning to look like a wreck.

It is a striking contrast; if you are arriving in New York or leaving, there is the Triborough Bridge finely maintained, up to date, clean and good for another century, and right alongside, a masterwork of engineering that is rusting. And we can't get anybody to pay any attention to it.

It is getting this committee angry. If we don't have some influence with the direct appropriations of the people involved, we have influence in this body. It is getting to be a scandal. We have not been able to engage the Secretary of Transportation or Amtrak. We have been patient.

Mr. Vallone and Mr. Manton and I have had field hearings in Astoria, we have written letters, we have done all the things that bespeak an orderly approach to what would seem a routine problem. Nothing so far has worked.

I have said enough. I know that the Speaker has to get back to the city. If he would be good enough to come forward with Mr. Manton, we would welcome you both.

Mr. Manton, in the custom of the Congress, if you would begin, sir. You are very welcome, and I need hardly say why.

STATEMENT OF HON. THOMAS J. MANTON, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEW YORK

Mr. MANTON. Thank you, Senator. My name is Thomas J. Manton. I am a member of the House of Representatives from the Ninth Congressional District of New York, which includes the westernmost part of Queens, one of the boroughs of our city.

Before I start, if anybody was watching the Today Show this morning, Mayor Dinkens was being interviewed by Bryant Gumbel at Gracie Mansion, which is on the other side of the river. In the background was the beautiful arch, which was being televised nationally, of the Hellgate Bridge.

Mr. Chairman, I appreciate being invited to testify before your subcommittee on the condition of the Hellgate Bridge in New York City. I particularly want to commend you for your leadership on this important transportation and public safety issue.

As you know, the Hellgate Bridge runs from the Bronx on the mainland, across Wards Island to Queens, where it then stretches by elevated viaduct from Astoria to Woodside, and passes over many of our streets. In fact, it passes over homes and backyards along its route.

The 70-year-old Hellgate Bridge, which is owned and maintained by Amtrak, is essential to the operation of Conrail and our Nation's passenger railroad system in the Northeast Corridor. Regrettably, the Hellgate Bridge is in a dire state of disrepair. For the past several years, huge pieces of concrete and other debris have fallen from the bridge onto homes and into the streets of our neighborhoods. I, and of course, my Speaker, who also represents that area, receive a number of calls each year from constituents with fallen bridge debris in their backyard.

With increasing frequency, roadways are closed until the ballast off the bridge can be removed from the streets below. This is not only an inconvenience for commuters, but it also poses a serious threat to the health and safety of people who live or work near the Hellgate Bridge.

Senator MOYNIHAN. If I could interrupt—some of our guests might want to see some of the items that have fallen from 150 feet up.

Mr. MANTON. It would be a great res ipsa loquitur case. But seriously, this is the type of debris that has been falling, and certainly could kill or maim someone who would be perhaps 100 feet below the viaduct.

In addition to the falling debris, the bridge itself has become increasingly rusted. We are all concerned that the rust and erosion could undermine the soundness of the bridge structure. The bridge has not been painted for over 50 years. It seems to me that some cycle of maintenance, some painting cycle similar to what happens on the Triborough Bridge, which is right nearby, would be in order.

Clearly, a paint job is long overdue, although I understand that it has been estimated that it could cost $40 million to paint the entire bridge. I believe it would make good sense to begin painting small portions of the bridge in some kind of planned cycle of painting over 10 or 20 years, whatever the case may be, at least to the portions that have suffered serious rust damage.

I recognize that there are limited resources available to Amtrak for capital improvement projects. However, this does not excuse Amtrak from addressing major problems like the Hellgate Bridge. Amtrak must make the repair and refurbishing of the Hellgate Bridge one of its capital priorities.

As a member of the House Energy and Commerce Subcommittee on Transportation and Hazardous Materials, I have worked for legislation to provide additional funding for Amtrak's capital budget. I have strongly supported the conference report on the fiscal year 1990 Amtrak reauthorization measures. In fiscal year 1989 Amtrak received an appropriation of some $584 million. The conference

agreement authorized $656 million in fiscal year 1990, $684 million in fiscal year 1991, and $712 million in fiscal year 1992.

The legislation directs Amtrak to spend this increased funding on capital improvement projects. The conference agreement was approved by the House by an overwhelming vote of 322 to 93, and passed this body by a voice vote.

Regrettably, the White House has indicated that President Bush will veto the bill because it authorizes too much money for Amtrak. I am sure we are all deeply disappointed that the President has decided not to make the investment necessary to improve the efficiency, reliability and safety of the Nation's passenger railroad system.

Mr. Chairman, I hope that Amtrak will not use the President's veto of the Amtrak authorization measure as an excuse to further postpone or ignore much needed maintenance and renovation projects, particularly the Hellgate Bridge.

I thank you for the opportunity to testify, and will be happy to answer any questions.

Senator MOYNIHAN. Thank you.

Mr. Speaker, we welcome you. This has to be the first time that a Speaker of the New York City Council has appeared before this committee, because there has never before been a Speaker.

STATEMENT OF PETER F. VALLONE, SPEAKER, COUNCIL OF THE CITY OF NEW YORK

Mr. VALLONE. Thank you, Senator. I thank also Senator Symms, the ranking member. I understand that he can't be here, but this is very important testimony regarding what should be a national treasure rather than a national tragedy.

This bridge is used by both Amtrak and Conrail to transport passengers and freight to and from Northeast points of the country. It spans the East River and cuts through a large part of a district I represent in Queens, before running underground en route to Manhattan.

I bring to you today the concerns of many of my fellow residents, community board representatives and civic leaders who have growing concerns about the railroad span's deteriorating condition. I believe the piece that you hold fell as we were observing it in 1988, within a few feet of where we were standing, unplanned. We had a 30-foot girder as high as this room that impaled itself in Shore Boulevard shortly before that incident.

I raise these concerns from more than a public safety and maintenance standpoint. The Hellgate Bridge serves as a major rail link between Washington and Boston. Any unforeseen closure of this bridge could cause major service disruptions to that line, and other destinations.

For decades, chunks of concrete, rusted steel and other track debris have fallen from the bridge. These objects have smashed car windshields, fallen into people's back yards and landed on roadways. On more than a few occasions, Shore Boulevard, which runs along the East River and under the bridge, has had to be closed until fallen objects could be cleared away. It is no small miracle that no one has been seriously injured by falling debris.

The decades of neglect to the Hellgate Bridge are visible to the naked eye. Its rusting span over the East River shows a clear need for major upgrading and painting. Yet, when I wrote to Amtrak in June of 1988, they stated they were "unable to fund any aesthetic improvements such as bridge painting." Any bridge expert and engineer will tell you that paint is one of the most essential components of bridge upkeep and maintenance.

When you and I held a hearing on this matter with Congressman Manton, myself and other officials in Astoria, Queens, an Amtrak official conceded that under normal conditions the bridge should have been painted at least three times in the last 45 years. To the best of my knowledge, it has not been painted since 1939.

Some will argue that the Hellgate does not require as much painting as vehicular bridges, since it is not sprayed with salt and other chemicals. That is nonsense. When steel is not painted, it rusts.

A memo I received this week from the New York City Department of Transportation praises the Hellgate as one of the world's best examples of building art, along with the Eiffel Tower and the Brooklyn Bridge, and states the following:

> The assumption that this landmark bridge can function indefinitely without paint since it is not exposed to deicing salts is erroneous and can cause serious damage to the structure, as well as considerable injuries to the public.

A DOT expert on corrosion notes that the Hellgate has been "exposed for the best part of the century to all the atmospheric salts. This is a significant amount, particularly for the span over the water, which is continually covered with condensed moisture." That span is 977 feet high, as the Senator knows. "The presence of sulphur and sulfides in the atmosphere is also a significant factor accelerating the corrosion rate."

In a 1988 study of New York City bridges, DOT noted that steel protection is one of the most important components of any preventive maintenance program.

Our experience with the Williamsburg Bridge in New York exposed the critical need to paint bridges, not only to maintain them, but to avoid higher costs and drastic closures further down the line.

City engineers concluded in a 1988 DOT report that "It is nearly three times less expensive to maintain a bridge than to let it deteriorate and be forced to rebuild it in 50 years." The report further stated that "painting is the single most cost-effective measure for preserving bridges. It prevents weather conditions, air pollution, and deicing chemicals from causing structural damages to bridges."

I strongly urge rail officials to take a serious look at this matter and develop a long range plan to upgrade and maintain the Hellgate Bridge Viaduct.

I realize funds are low. We are grappling with massive deficits on all levels of government. But if we do not act now, taxpayers will surely pay more in the long run.

Thank you very much, Senator. I have tried to make it as brief as possible. It is totally inconceivable to me that people charged with the protection and maintenance of bridges throughout this country can simply state that a structure of this type can remain

apparently indefinitely, as long as the pyramids, without painting. There has to be some cutoff, even with our so-called experts, as to when this bridge should be painted.

Senator MOYNIHAN. Obviously you and I agree. Getting the attention of the Department of Transportation has not been easy. This thing may turn nasty before too much longer. They have got to hear the speaker of the city council of the largest city in our country, the chairman of the county in which it is located, a Member of the House, this Senator, saying that this is not acceptable. They cannot sit there and let the Hellgate Bridge rust before our eyes.

It matters that it is a beautiful bridge. For what it is worth, the American Society of Civil Engineers has in their calendar this year—they picked the 12 wonders of United States engineering, and there of course is Hellgate. Right back here is LaGuardia Airport. You can't get from Washington to New York to Boston unless you use this system.

You could ask where our common sense has gone, what happened to us, when did we stop being able to think of the obvious. Anybody who owns a house knows you have to keep the roof from leaking, anybody who has ever had an automobile knows you have to keep the rust from the underside. It just baffles me.

The city council is absolutely of the view that this should be done.

Mr. VALLONE. No question about that, Senator. This is kind of a major—if there is no concession on a national level that this magnificent structure, if not the longest elevated railroad bridge in the world, it is certainly one of them—if this can just be abandoned by the Federal Government when New York City can put billions of its own taxpayer dollars into maintaining our own bridges, then what is left? What responsibility does the Federal Government have for anything, if they can't take care of this?

Senator MOYNIHAN. It is not as if it were somewhere off in the Rocky Mountains and people did not know about it. It says something to the world about the United States. You arrive here from Tokyo and the first thing you see is an absolutely magnificent piece of infrastructure rusting before your eyes. You have already learned something that we would just as soon people not know.

This bridge just did not happen. Lindenthal was given the assignment in 1901. It took 11 years to design, 5 years to build, at a time when we could do a lot of building in 5 years. We built the Empire State building in 13 months. To let it just molder is offensive.

I know you are the chairman of the county committee, and I am sure you can speak for the entire New York City delegation on this matter.

Mr. MANTON. I think I can safely say that we would be supported in our efforts by the entire 14-member delegation. We went through a period of a problem with the Williamsburg Bridge, where it had to be shut down, and it had a paralyzing effect on the people in Brooklyn.

We are hard at work in the city to make certain that bridge and the Queensborough Bridge and all the other bridges are properly maintained. The city is spending enormous amounts of money in its capital budget to deal with these bridges. I think it is only fair

that a bridge that comes under the aegis directly or indirectly of the Federal Government should also be maintained as part of the transportation network within our city.

Senator MOYNIHAN. What do you say about concrete, that at the outset—it was 1901 when the Pennsylvania Railroad said let's build this span—at the outset you can build these things, create them, design them. At the end of the century, we can't even paint them.

That is not a good thing to tell the world.

I am going to ask if you would mind if we recessed for 5 minutes, as the Speaker has something he needs to deal with. We will get on with this shortly. I am sorry to keep delaying you.

The committee stands in recess for 5 minutes.

[Recess.]

Senator MOYNIHAN. Mr. Claytor, we have kept you here longer than we should have, and I understand you have to leave shortly, so why don't we begin with you directly.

We welcome you to this hearing. We know that you have limited resources and limited ability to allocate them, but you go right ahead.

STATEMENT OF W. GRAHAM CLAYTOR, JR., PRESIDENT, AMTRAK, ACCOMPANIED BY DENNIS F. SULLIVAN, EXECUTIVE VICE PRESIDENT AND CHIEF OPERATING OFFICER

Mr. CLAYTOR. Thank you, Mr. Chairman.

On my left is Dennis F. Sullivan, Executive Vice President and Chief Operating Officer of Amtrak.

Senator MOYNIHAN. Mr. Sullivan, we welcome you.

Mr. CLAYTOR. Mr. Chairman, as President of Amtrak, I am pleased to be able to be here to discuss the Hellgate Bridge, and deal with some of the concerns that have been expressed.

Mr. Sullivan is an engineer by profession and is knowledgeable about bridge structures in the Amtrak system. I think it would be in the best interests of the committee if I asked Mr. Sullivan to provide a brief summary of his prepared statement and respond to any questions you have, and I will be glad to respond, also. I can stay until about 20 minutes until 12 o'clock. I have a doctor's appointment that it took six months to get, and I don't want to let it go.

Senator MOYNIHAN. We won't keep you that long.

Mr. CLAYTOR. As Mr. Sullivan will explain, there are two issues here. They are really quite separate. One is the approach structure to the bridge, which is an elevated structure with ballasted welded-rail track. Then there is the bridge itself, which is quite a separate structure from the approaches. There are two problems, and we need to look at each of them. Mr. Sullivan will do that, and I will try to answer any questions you have, but he can answer better than I can.

Senator MOYNIHAN. Mr. Sullivan, we welcome you. Go right ahead.

Mr. SULLIVAN. Thank you, Mr. Chairman. It is a pleasure for me to be here to testify before the subcommittee.

You have raised many concerns over the years about the condition of the Hellgate Bridge that passes over the East River. As you stated, the bridge is approximately three miles long, and Amtrak does recognize its responsibility to maintain this structure.

The safety of our passengers and employees, and the citizens that live and work around the Hellgate Bridge, is recognized by us. Safety is a number one issue with Amtrak, and we will do nothing to compromise the safety of those citizens, either our passengers and employees, or the citizens that live and work around the bridge.

Amtrak's own regulations require that we inspect bridges annually. The Hellgate Bridge was inspected by our bridge inspectors in 1989, and we have an ongoing inspection that takes several months to conclude going on in 1990. The results of those inspections show to us that the bridge is structurally sound. The track and the roadbed is in excellent shape, having been completely renewed in the late 1970s and early 1980's.

There are two concerns, as Mr. Claytor mentioned. One is the painting of the bridge. The bridge has not been painted since about 1939. However, we feel that the lack of paint has had minimal impact on the safety or the longevity of this structure.

Unlike highway bridges, no salt is used in the maintenance of these bridges that can deteriorate the steel—erode the steel on the bridge itself. The life of the bridge is mainly dependent upon the weight and traffic operating over the bridge.

We feel that the Hellgate Bridge currently has a life expectancy of at least 120 years, based on its existing condition. The cost to paint the bridge we currently estimate at $43 million. This includes $28 million to prepare and paint the structure itself, and $15 million for environmental protection. There is a lead-based paint on the bridge, and when this paint is removed, in order to repaint the bridge, we would have to protect the citizens and the water under the bridge from any lead-based paint entering it.

Senator MOYNIHAN. May I ask you, Mr. Sullivan—this is getting a little crazy, you know? I saw the breakdown of what it would cost to do the painting, and the environmental protection measures cost more than the painting. You have given us a scenario in which we are going to have to wrap the bridge?

Mr. SULLIVAN. Yes, sir.

Senator MOYNIHAN. Who told you we would have to do that?

Mr. SULLIVAN. We would have to contain the bridge structure from——

Senator MOYNIHAN. Who said so?

Mr. SULLIVAN. These are environmental laws that we would have to adhere to, Senator.

Senator MOYNIHAN. Which law says you would have to put the Hellgate Bridge in a package?

Mr. SULLIVAN. Any of the lead that comes off the bridge has to be contained. It cannot be allowed to fall into the river.

Senator MOYNIHAN. It's not a river, it's an estuary. It is by usage, a river, of course, but it is tidal.

Who told you that? If you have that in writing, I would like to meet the fellow.

Mr. SULLIVAN. We have bridges all over the system where we have had to comply with State and Federal laws, and we can provide the committee with——

Senator MOYNIHAN. Would you do that?

Mr. SULLIVAN. Oh, yes, sir.

[The information referred to follows:]

ENVIRONMENTAL REGULATIONS AND STANDARDS APPLICABLE TO PAINT REMOVAL, HELLGATE BRIDGE

Sandblasting and painting operations at the Hellgate Bridge are subject to the following federal and New York state regulations:

(1) Classification as Hazardous Waste: 40 CFR Part 261 and NYCRR Title 6 Chapter 371

(2) New York Water Quality Standards, Title 6 NYCRR Part 701 Appendix 31, limits maximum concentration of lead in saline surface waters to 8.6 micrograms/liter (ug/1).

(3) New York State Air Quality Standards, Title 6 NYCRR Chapter III, Subchapter B, Part 257-3 for Level II areas (residential):

(a) Total Suspended Particulates (TSP): 30-day average—100 ug/m ^{3}; 60-day average—85 ug/m ^{3}, and 90-day average—80 ug/m ^{3};

(b) Dustfall annual average, half of values to be less than 0.30 milligrams per square centimeter each month.

(4) National Ambient Air Quality Standards for Lead, 40 CFR Part 50.12, limits concentration to 1.5 ug/m ^{3} over 90-day period.

(5) New York State Environmental Conservation Law, Article 25—Title Wetlands, Title 4, Regulated Activities. Project review and permits required for depositing sand and other debris into tital wetlands. (Also at 6 NYCRR 608, 663, and 661).

Mr. CLAYTOR. Throughout New England, we have a number of bridges that go over estuaries and the mouths of rivers, particularly between——

Senator MOYNIHAN. Of course. Yes.

Mr. CLAYTOR. And whenever one of those bridges is painted, we have this kind of problem. So we have lived with it.

Senator MOYNIHAN. Mr. Reser.

Mr. RESER. Mr. Chairman, my notes tell me that it is an EPA requirement that—particle fall is what they call it—would have to be contained from any existing lead-based painted bridge. It's an EPA requirement.

Senator MOYNIHAN. I can understand that that might be. But I can't understand that everybody is saying it is a problem we can't solve. We are getting there so fast. Has anyone thought to get EPA to come in and help? You first have to want to do the painting.

Go ahead, Mr. Sullivan.

I will get to the EPA, and to you, Mr. Reser.

Mr. SULLIVAN. I would like to point out that in the last 5 years, Amtrak's average capital has been $37 million per year.

Senator MOYNIHAN. Appropriated.

Mr. SULLIVAN. Appropriated capital. Our assets are depreciating at over $165 million per year. We need desperately to acquire additional equipment and make other capital improvements to our system. We are even looking at private financing to help us finance capital improvement projects, including the purchase of locomotives and cars.

Our 5-year projection indicates a need for over $2 billion in capital to carry out critical needs as a corporation. We will most likely fall far short of appropriated capital to meet these needs. We must

focus the Federal capital which we do receive on providing a safe, efficient and reliable transportation mode throughout the country.

Other capital needs, such as painting, must regrettably be delayed.

As we reduce operating costs, we are very optimistic that the Congress will work with us to provide increased appropriations for equipment acquisition and plant modernization. However, near term we feel we do not have enough capital to meet even our most pressing needs.

As you know, Amtrak has advocated a unified surface transportation trust fund supported by a Federal gasoline tax. One cent from such a tax would meet our needs quite handsomely and allow Amtrak to not only purchase equipment and carry out other major capital programs throughout our system, but enhance our system with high-speed rail, which will help alleviate the growing air and highway congestion that our Nation faces.

The second major problem—getting back to the Hellgate Bridge—is that of the falling ballast. For the very short term, we have a program going to remove any debris and ballast that is up on the bridge that may fall or be thrown from the bridge to the communities below. In the longer term, I am pleased to report that we have requested 1991 NECIP funding for a project to begin sealing of the Hellgate Bridge.

Senator MOYNIHAN. What do you mean by sealing?

Mr. SULLIVAN. There are areas on the bridge where the walkways—where ballast is able to work itself down onto the walkways and fall onto the roads and the communities below. We want to tighten up those walkways, replace them where necessary, and seal them so that that phenomenon cannot occur. We want to progress that project over the next 2 to 3 years, and completely seal the bridge so that we do not get any further occurrence of falling debris.

Senator MOYNIHAN. Good. That's important.

Mr. SULLIVAN. We would be glad to keep the committee informed about progress on that important project.

Senator MOYNIHAN. This is part of your Northeast Corridor improvement program that is underway?

Mr. SULLIVAN. Yes, sir.

Mr. CLAYTOR. It is underway.

Senator MOYNIHAN. Are the moneys available for this particular sealing?

Mr. SULLIVAN. It is in our request for fiscal year 1991.

Senator MOYNIHAN. How much?

Mr. SULLIVAN. We have requested $1 million to begin the process of sealing.

Senator MOYNIHAN. It is $9 million for that whole category, bridge replacements and upgrades?

Mr. SULLIVAN. That's correct.

Senator MOYNIHAN. And you need $1 million for this particular sealing?

Mr. SULLIVAN. We need $1 million to begin with. To do the whole bridge, we estimate it will be in excess of $4 million.

Senator MOYNIHAN. Will you send us a letter stating that, so that we have it in the record?

Mr. SULLIVAN. Yes, we will do that.

[The information requested follows:]

National Railroad Passenger Corporation, 60 Massachusetts Avenue, N.E., Washington, D.C. 20002 Telephone (202) 383-3000

Amtrak

June 25, 1990

Honorable Daniel P. Moynihan
Chairman
Subcommittee on Water Resources,
Transportation, and Infrastructure
United States Senate
Washington, DC 20510

Dear Chairman Moynihan:

At the recent May 16, 1990, hearing regarding the Hellgate Bridge, you requested a detailed estimate of the cost to seal the Hellgate Viaduct and to eliminate the falling debris from this structure. We estimate that the total cost will be $5.08 million. We have requested $1 million in NECIP funding for Fiscal Year 1991 to begin the project, and it is our intention to request the additional $4,080,000 in 1992 for sealing the bridge.

I have enclosed a detailed cost estimate in 1990 dollars, for the preparation, painting and disposal of toxic waste debris for the Hellgate Viaduct.

I have also enclosed a document which covers environmental regulations and standards applicable to paint removal on this bridge.

If there is any additional data we can provide the Subcommittee, please let me know.

Sincerely,

Tim Gillespie
Assistant Vice President
Government and Public Affairs

Enclosures

AN EQUAL OPPORTUNITY EMPLOYER

Hellgate Viaduct - Queens, NY
Elimination of Falling Debris

Cleanup and remove excess debris; reline and anchor concrete walkway planks; install steel spacers; replace barricades; install temporary catch trays during the ballast removal work; remove old railings, walkways and framing

Labor - 26 man years at $60,000 per man	. . . .	$1,560,000
Material & Equipment		
Includes purchase of Over/Under bridge inspection and maintenance vehicle. Purchase of steel spacers, catch trays and railing material	. . . .	3,080,000
Engineering	. . . .	203,500
Sub-Total		$4,843,500
Contingency (5%)		242,275
Total Cost		$5,085,675

Clean and Paint Hellgate Viaduct

Clean and Paint	
Power tool cleaning, epoxy mastic primer, and aliph-urethane top coat	
5,390,000 sq. ft. @ $3.74 per sq. ft.	$20,158,600
Environmental Enclosure	
Capture toxic waste, shield paint dispersal	7,536,450
Collect, Handle, and Dispose of Toxic Waste Debris	6,355,688
Environmental Control	
Monitoring, inspection and community relations	2,016,300
Engineering Design, Inspection, and Force Support	3,023,900
Sub-Total	$39,090,038
Contingency (5%)	1,954,547
Total Cost	$41,045,485

CLEAN AND PAINT HELLGATE VIADUCT
(Station 4+50 to Station 180+49)

The following areas would have to be controlled to ensure correct and necessary environmental and community relationships occur which would include full containment consisting of the following major items:

1. Protection of natural resources, including the air, water and land surrounding the bridge.

2. The disposal of the waste materials, including lead base paint from the bridge structure.

3. Control of all toxic substances utilized in the bridge which would include not only the lead base paint removed, but also any materials used in bridge steel preparation.

4. Necessary control and monitoring to ensure the noise level is not objectionable.

5. Control of any presence of chemical, physical and biological elements and agencies which adversely affect and might alter the ecological balances.

6. Protection to ensure the non-degrading of the recreational or aesthetic use of the surrounding environment of the bridge on both land and water.

7. Protection in order not to impact the daily activities of rail traffic, as well as land and water usage beneath or adjacent to the bridge.

Senator MOYNIHAN. I would also like to put into the record this bizarre business that we have from you about the Hellgate Bridge—the cost to paint the Hellgate Bridge in 1990 dollars is $43 million, of which only $20.6 million goes into the painting. The rest goes to the EPA.

Less than half goes to the painting. The rest goes to environmental monitoring and inspection.

Mr. SULLIVAN. Our estimate was that $27 million would be required for the preparation and painting, and some $15 million for the environmental work that is involved.

Senator MOYNIHAN. This is from you.

Mr. CLAYTOR. It is substantial.

Mr. SULLIVAN. We will clarify the numbers, Senator. But it is that order of magnitude to do the entire job.

Senator MOYNIHAN. We are not getting anywhere with you, because you don't have the money. I think if you had the money you would do this, wouldn't you, Mr. Claytor?

Mr. CLAYTOR. Senator, here's the problem. We would clearly give a high priority to anything that is necessary to preserve that bridge. However, our annual inspections, and we have lots of photographs, show some surface rust, but almost no degradation of structure. Actually, some of the minor support beams have in the past been noted to have some degradation. The small support beam, which is very thin, is obviously more susceptible than the big heavy beams.

Those have, in turn, been either replaced or painted. We do that every year. Anything that shows any significant degradation is taken care of.

But surface rust, which does not involve degradation of the steel, is a cosmetic thing. It is highly desirable to have the bridge look beautiful. We would love to have it look beautiful. But there is no conceivable way that I could justify allocating the capital with missing capital that is causing us to cancel trains because we don't have enough equipment, to do structural changes.

We are rebuilding some bridges on the Northeast corridor that need to be rebuilt. We are spending the money for that. But to allocate this money for cosmetic purposes—we cannot do that.

Now, if some miracle happened and the Army Corps of Engineers decided that for cosmetic reasons that they would like to paint the bridge, we would love to cooperate with them. But I cannot, in all honesty, allocate the capital that I don't have in adequate supply for cosmetic reasons. I will do it any time it is necessary for structural preservation reasons, but not cosmetic reasons.

That's my problem.

Senator MOYNIHAN. Sir, you are a man of reputation, and rightly so. I respect your professional judgment and it has to abide, but you would agree that there is room for another view. I might have a different view.

Mr. CLAYTOR. Yes, sir.

Senator MOYNIHAN. My view might not be as important as yours, but we are of a different view.

Mr. CLAYTOR. Mr. Chairman, I understand. But let me say that I am not a bridge expert on structure. I am not an engineer. But I with me all of our Amtrak bridge engineer, who supervises the in-

spection of the structure. Mr. Sullivan is himself an engineer, and has personally been involved in the inspections.

We are satisfied that there is no problem of safety or of longevity involved in not painting the bridge as a whole. Where there are individual indications of degradation, we fixed it. That's the policy. I just cannot apply money that we don't have to cosmetic operations.

I think it is a community problem, it may be a national problem, but it is not a railroad operating problem. As long as I am tight as I am on money, I cannot do this for cosmetic reasons. That's my problem.

Senator MOYNIHAN. You have made it very clear. I don't know how we are going to get to resolve it. We obviously have to find you money.

It is just 10 minutes after 11 o'clock. Can you stay for another 10 minutes?

Mr. CLAYTOR. Yes, sir.

Senator MOYNIHAN. Mr. Reser, good morning, sir. You have some gentlemen with you.

Mr. RESER. Yes, Mr. Chairman. Let me introduce Greg McBride on my left, he is the Assistant Chief Counsel for Safety at the Federal Railroad Administration, and Ed English, who is the Acting Director of the Federal Railroad Administration's Office of Safety Enforcement. I might add that he is a former track specialist with the Federal Railroad Administration.

Senator MOYNIHAN. Gentlemen, we are happy to have you here.

STATEMENT OF HON. GALEN J. RESER, ASSISTANT SECRETARY, GOVERNMENTAL AFFAIRS, U.S. DEPARTMENT OF TRANSPORTATION, ACCOMPANIED BY: GREG McBRIDE, ASSISTANT CHIEF COUNSEL FOR SAFETY, FEDERAL RAILROAD ADMINISTRATION; AND ED ENGLISH, ACTING DIRECTOR, OFFICE OF SAFETY ENFORCEMENT, FEDERAL RAILROAD ADMINISTRATION

Mr. RESER. Thank you, Mr. Chairman. Although we have not submitted a formal statement to the committee, Mr. Chairman——

Senator MOYNIHAN. You don't have a statement?

Mr. RESER [continuing]. I would like to make some preliminary remarks, if I might beg your indulgence for a second.

The safety of railroad bridges is extremely important to the Department of Transportation. We believe we are fortunate that the approximately 130,000 railroad bridges in this country were generally built to standards of strength well in excess of those required to assure safety and that as a result, our railroad bridges remain in good shape today.

In fact, the history of railroading indicates virtually no railroad accidents having ever been caused by the structural failure of a bridge. Both the quality of design and construction of these bridges, and the active inspection programs conducted by the railroads, have contributed to this excellent record.

That record has obviated the need for Federal standards thus far, although Federal railroad inspectors do pay special attention to the condition of railroad bridges in the course of their normal inspection activities.

Virtually every railroad makes annual or more frequent inspections of its bridges. However, the Federal Railroad Administration recognizes the necessity to ensure safety in the future. We are now establishing a program to conduct a thorough analysis of the Nation's railroad bridges.

As the first step, FRA will make a complete inventory of all existing bridge structures that will disclose such factors as age, type, inspection and maintenance practices and design criteria. FRA will then select a certain number of structures for detailed physical examination.

Depending on the results of this long-term effort, Federal railroad safety standards may be appropriate at some point in the future.

Having said that, I am happy to answer any questions you might have.

Senator MOYNIHAN. You haven't said much. At least you have come here. It's all I can do to get your Secretary to answer the mail. It took almost a year to get an answer out of the Department of Transportation about this subject.

Are there going to be any bridges you are looking at specifically? Will the Hellgate be one of them?

Mr. RESER. Yes, sir. We will have a team of two or more railroad inspectors look at the steel arch over the East River.

Senator MOYNIHAN. When?

Mr. RESER. We would expect to do that this year. Let me say that we did have personnel from our Cambridge regional office inspect the structure on May 18 of last year. Although the track structure was the primary focal point of that examination, the FRA inspectors took no exception to the visible surface area of the arch itself. So we did not see a problem during that inspection, but we will do another one.

Senator MOYNIHAN. Do either of you gentleman want to add to that?

Mr. ENGLISH. That inspection will take place very shortly, and will probably start in the middle part of next month. We will have qualified registered engineers participating in that team looking at the bridge and making an evaluation.

Senator MOYNIHAN. Will you let this committee know what you find?

Mr. ENGLISH. Yes, sir, we will.

Senator MOYNIHAN. I wrote the Secretary of Transportation on March 9, 1989 about this question, asking if he would raise the issue when the Amtrak Board met, to see if the structure is painted and maintained. A year went by. Literally a year went by, and I never heard from Mr. Skinner.

I wrote him again on March 9, 1990. That does not suggest a degree of interest in the subject that we have in this committee and that city. It doesn't seem to reach the Department of Transportation.

Mr. RESER. Mr. Chairman, I am glad you raised this, and I know this is a sore point for you.

Senator MOYNIHAN. It's not a sore point, it's just a——

Mr. RESER. I understand. I think the Secretary expressed his regret in his letter to you dated April 13 that we thought there was

a misunderstanding over the correspondence that had gone back and forth.

We pride ourselves on answering the mail we receive from Capitol Hill, and I think we have a pretty good record in that regard. But there was a misunderstanding and we talked about that with your staff.

We got your second letter and we did in fact respond just as quickly as we could. I would hope you will not take this one instance and let it color your feelings for the Secretary or the Department, because it was an honest misunderstanding on our part. I admitted that, and I will admit it to you today.

Senator MOYNIHAN. That's very handsome of you, and I appreciate it, but we will continue to study this matter and we will get a professional judgment. Let this committee know, if you will.

Mr. Claytor, I don't envy you your work, and we admire the way you are going about it. If the resources are not there, I suppose you have to make that judgment. We are not going to tell you what judgment to make. That's why you have your job.

But you do hear us saying that there is something anomalous about this extraordinary structure, in the center of the transportation network of New York City, just moldering there for the world to watch. I know perfectly well that if you felt safety was an issue, you would be there immediately.

Mr. CLAYTOR. Mr. Chairman, I agree with you. I think it is one of the most beautiful bridges in the world. It is in the category of the Firth of Forth Bridge in Scotland. Those two are two of the greatest railroad bridges of all times.

I would love to see it shining and glistening. But when I don't have enough money to do things that are really needed for maintenance of the transportation, then for safety of other places, I have to put the money where it is needed first.

Senator MOYNIHAN. This committee is not going to question your judgment.

But I did hear you say what I knew you felt—that you love to see it shining.

Mr. CLAYTOR. I certainly would.

Senator MOYNIHAN. And you are quite right.

Mr. CLAYTOR. Mr. Chairman, before I go, could I mention a totally separate subject? I would like to come and talk with you about one of my favorite topics, magnetic levitation, because Amtrak is extremely interested in participating in magnetic levitation in this country. We would like to be the operator and maintainer of any magnetic levitation operation that is started. We have been in touch with all those interested to let them know that.

Senator MOYNIHAN. Oh, sure. We most certainly can. I would hope we will. We probably can hold a hearing and get it on the record. Thank you for that.

I thank you for your statement. There is just something the matter with a country that can build something like this in the beginning of the century, and not paint it at the end of the century. The battleship *New Jersey* is not in danger of sinking if it is not painted. But the captain does not let it go around looking like a rust bucket. Ships don't work right when they look like they are rusting to pieces.

Mr. CLAYTOR. I agree.

Senator MOYNIHAN. You agree. I know you agree.

Thank you gentlemen. The record will be held open for reports, from you, sir, Mr. Reser, we will appreciate it.

Thank all of you very much.

[Whereupon, at 11:20 a.m., the subcommittee was adjourned, to reconvene at the call of the Chair.]

[Mr. Claytor's prepared statement follows:]

TESTIMONY OF THE

NATIONAL RAILROAD PASSENGER CORPORATION

BEFORE THE

SUBCOMMITTEE ON WATER RESOURCES, TRANSPORTATION

AND INFRASTRUCTURE

UNITED STATES SENATE

May 16, 1990

The National Railroad Passenger Corporation, better known as Amtrak, is pleased to be here today to discuss the condition of the elevated railroad structure over the East River and through Queens, New York, called the Hellgate Bridge.

Mr. Chairman, over the years you have raised several concerns about both the safety and the appearance of the Hellgate Bridge. The proper maintenance of the structure, which is nearly three miles in length, is essential to the operation of Amtrak service north of Penn Station. I want to emphasize that we recognize our important responsibility for maintaining the structure in such a way as to maximize the safety of our passengers, employees, equipment, and the citizens who live and work near the bridges. Safety is my number one priority at Amtrak and we would never intentionally take any step that would compromise that safety.

Amtrak's own regulations require that the Hellgate Bridge be routinely inspected on a yearly basis. The entire bridge and its approaches were last inspected in 1989 and are undergoing the 1990 inspection as we speak. Due to the length of the structure, the inspection is expected to take some six months and should be completed by the end of June. Inspections to date indicate that the Hellgate Bridge and its approaches are structurally sound and that there is no need for any correction,

repair or rehabilitation at the present time. I would note that the ballast and rail on the bridge were completely replaced several years ago and the track and roadbed are in excellent condition.

Your concerns have focused on two issues: the need to paint the structure; and falling ballast. I would like to address each of these concerns separately.

Painting The Hellgate Bridge

The Hellgate Bridge has not been painted in several decades and we can very much appreciate concern by the citizens who live and work near the structure over its appearance. It is essential to emphasize, however, that the lack of paint has minimal impact on the safety or longevity of the Hellgate Bridge. Unlike highway bridges, railroad bridges are not de-iced with salt, and there is no salt corrosion which is commonly associated with highway bridges. The life of the structure is dictated by the weight of the traffic operating over it and by the extent to which the bridge is routinely maintained. Indeed, while the design criteria for ordinary steel railroad bridges are based on an 80-year life expectancy, the Hellgate Bridge was constructed in such a way, and carries sufficiently light passenger loads, that we estimate its useful life at 120 years or more.

We have analyzed the cost of painting the Hellgate Bridge. Because of environmental concerns regarding both the removal of existing lead-based paints and the application of new paints, the cost would be a rather astounding $43 million. This includes some $28 million to actually paint and prepare the bridge, and another $15 million to environmentally enclose, collect and dispose of toxic waste debris.

During the past five years, Amtrak has averaged just $37 million per year in federally appropriated capital for its entire rail passenger system. Our assets are depreciating at a far faster rate -- over $165 million per year -- which means we are falling further and further behind. We desperately need to acquire additional equipment to meet the existing and growing demand for rail passenger service. Indeed, given the lack of federal capital, we have begun looking to the private sector to finance some capital projects. While this is enabling Amtrak to address some of its most critical capital needs, it unfortunately results in interest costs that make it more difficult for us to reduce our need for federal operating support. As you may know, Amtrak has committed itself to eliminating its need for any federal operating support by the year 2000, something no passenger railroad in the world has achieved.

Amtrak's five-year capital plan envisions a need for over $2 billion in new equipment and plant modernization that is essential if we are to eliminate our need for federal operating support. Nonetheless, if history is any indication, Amtrak will fall far short of obtaining this amount of capital and we will have to prioritize our capital needs in order to fund only the most important projects. Given our responsibility for maintaining the safe operation of the Northeast Corridor and for providing the public with a safe, efficient and reliable mode of public transportation, our limited capital must first be focused on those programs that are essential to our job of operating the nation's rail passenger system. Many other capital needs, such as station improvements, facility upgrades, desired track connections, and right-of-way beautification (including the painting of bridges, clean-up of refuse along the tracks, etc.) must necessarily assume a lower priority. This is the unfortunate reality of a corporation that is severely capital starved.

We are optimistic that as Amtrak reduces its need for federal operating support, Congress in turn will be able to provide Amtrak increased appropriations for equipment acquisition and plant modernization. Nonetheless, we do not anticipate sufficient capital funding in the near-term to meet even our most pressing capital requirements. It is for this reason that for several years Amtrak has advocated creation of a unified surface transportation trust fund, supported by the

federal gasoline tax, that would provide in a consistent and coordinated manner the federal investment in surface transportation. In the event that Congress decides to increase the federal gasoline tax to address growing concerns over the nation's transportation needs, both Amtrak's depreciation and its expanding capital needs for the next decade could be met by allocating just a penny -- one cent -- of the new federal gasoline tax revenues to Amtrak. With this relatively modest financial support, Amtrak would be able to provide enhanced conventional and high-speed rail passenger service that would alleviate growing air and highway congestion in many areas of the nation at far less cost and with less adverse environmental impact than the enormously expensive construction of new airports and highways. It also would provide the funds required to address our long and growing list of important but non-essential system-wide capital needs. The result would be a properly-capitalized Amtrak ready and able to meet this nation's transportation needs in the next century.

Falling Ballast

Concern has been expressed in the past regarding ballast that has fallen off the Hellgate Bridge to the streets below. Beginning in the fall of 1988 and continuing to the present, we have taken short-term steps to prevent this problem by removing loose ballast and debris from the bridge. A long-term solution will involve "sealing" the Bridge to prevent ballast from falling through the separation between the different tracks and

installing barriers and meshing to prevent ballast from falling off the sides of the bridge. We are estimating a cost for this project in excess of $4 million.

Because of the safety concerns posed by falling ballast, we feel that this issue must be addressed. I am pleased to report that Amtrak has requested funds under the Northeast Corridor Improvement Project (NECIP) for FY 1991 to begin this long-term solution. Assuming NECIP funding is and continues to be available for this project, we would hope to complete it over the next two years. We will keep you fully appraised of our efforts to fund and complete this project.

Conclusion

Amtrak very much appreciates the Chairman's long support for Amtrak and his concern for the citizens who live and work near the Hellgate Bridge. We are sensitive to the issues the Chairman has raised but unfortunately can only address them to the extent of available capital funding. Protecting the public from falling ballast is an important priority; painting the Hellgate Bridge must necessarily assume a lower priority. Fortunately, there is no safety impact from our need to delay painting and we will continue to closely inspect the Bridge to ensure the safety of our operations.

Amtrak looks forward to working with the Chairman and this Subcommittee on this issue in the coming years and to making

Amtrak an even more important component of our national transportation system.

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